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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,399	06/29/2001	Masatoshi Arishiro	018976-199	6008

7590

08/27/2003

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EXAMINER

HARAN, JOHN T

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 08/27/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/893,399

Applicant(s)

ARISHIRO ET AL.

Examiner

John T. Haran

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1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Translation of JP 10-321457.

### **DETAILED ACTION**

1. This Office Action is in response to the amendment and arguments filed on 7/15/03. All previous rejections are withdrawn in light of Applicant's amendment to the claims and arguments.

#### ***Drawings***

2. The correction to Figure 1 filed on 7/15/03 has been accepted.

#### ***Information Disclosure Statement***

3. The information disclosure statement (IDS) submitted on 7/30/03 has been considered.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 04-239604 in view of JP 10-321457.

JP 04-239604 is directed to an apparatus for manufacturing laminated ceramic electronic components wherein the laminated ceramic components are formed by laminating a plurality of different ceramic green sheets. The apparatus comprises a sheet supplier comprising a plurality of trays, each tray holding a plurality of ceramic

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green sheets of the same type and each tray holding a different type of ceramic green sheet from other trays; a laminator for laminating a plurality of ceramic green sheets supplied from the sheet supplier; and a conveyor device for picking up single ceramic green sheets from the trays and conveying the ceramic green sheets to the laminator in a predetermined order (See English abstract and Figures 1 and 4).

JP 04-239604 is silent towards having a vertical rack for aligning the trays and a tray drawer device for drawing the trays from the vertical rack. However, it is well known and conventional in the ceramic art to store ceramic green sheets in a vertical magazine rack and remove single ceramic green sheets from the slots of the magazine in a predetermined order and convey them to a lamination station, as shown for example in JP 10-321457 (See Figure 5 and paragraph 0014 of computer translation). One skilled in the art would have readily appreciated that the trays of JP 04-239604 need to be stored somewhere and that it would be practical to have a vertical rack for storing and aligning the trays as is conventional in the art and consequently a tray drawer device for drawing the tray from the rack so the conveyor device can pick up the ceramic green sheets. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a vertical rack for aligning and storing the trays and a tray drawer device for drawing the trays from the rack so the conveyor device can pick up the individual ceramic green sheets in the apparatus of JP 04-239604, as suggested in JP 10-321457.

Regarding claim 2, one skilled in the art would have readily appreciated that either the tray drawing device needs to be movable to remove each tray from the

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magazine or the vertical rack must be movable to position each tray adjacent the withdrawal slider means. The two options are alternative expedients and are obvious one over the other in the absence of unexpected results. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a drive for driving the vertical rack to be raised and lowered in a vertical direction to position the trays at a predetermined height for removal by the tray drawing device in the apparatus of JP 04-239604, as modified above.

Regarding claims 3 and 4, JP 04-239604 teaches stacking ceramic green sheets of the same type in the trays and removing the top ceramic green sheet with a chucking device (See English abstract and Figure 1).

Regarding claim 5, JP 04-239604 teaches having a separate tray for each type of ceramic green sheet.

Regarding claim 6, JP 04-239604 teaches having a plurality of ceramic green sheets in each tray.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John T. Haran** whose telephone number is **(703)**


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**305-0052.** The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on (703) 308-2058. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
John T. Haran

  
Michael W. Ball  
Supervisory Patent Examiner  
Technology Center 1700